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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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1842/0105  
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EXAMINER  
HARSCHER A

ART UNIT	PAPER NUMBER
1867	44

DATE MAILED:

01/05/98

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.  
**08/487,974**

Applicant(s)  
**Gray et al.**

Examiner  
**Marschel, Ardin**

Group Art Unit  
**1807**



☒ Responsive to communication(s) filed on Sep 4, 1997

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 131-153 is/are pending in the application.

~~Claim(s) 1-130 have been canceled.~~ ~~Case withdrawn from consideration~~

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 131-153 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☐ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). (3 sheets)

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Since this application is eligible for the transitional procedure of 37 CFR 1.129(a), and the fee set forth in 37 CFR 1.17(r) has been timely paid, the finality of the previous Office action is hereby withdrawn pursuant to 37 CFR 1.129(a). Applicant's first submission after final, filed on 9/4/97, has been entered. If a notice of appeal and the fee set forth in 37 CFR 1.17(e) were filed prior to or with the payment of the fee set forth in 37 CFR 1.17(r), the payment of the fee set forth in 37 CFR 1.17(r) by applicant is construed as a request to dismiss the appeal and to continue prosecution under 37 CFR 1.129(a). The appeal stands dismissed.

Applicants' arguments, filed 9/4/97, have been fully considered but they are not deemed to be persuasive. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are newly applied. They constitute the complete set presently being applied to the instant application.

If applicant desires priority under 35 U.S.C. § 120 based upon a parent application, specific reference to the parent application must be made in the instant application. It is noted that this appears as the first sentence of the specification following the title. Status of the parent application (whether patented or abandoned) should also be included. If a parent application has become a patent, the expression "Patent No." should follow the filing date of the parent application. If a parent application has become abandoned, the expression "abandoned" should follow the filing date of the parent application.

Claims 131-153 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described

in the specification is such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. NEW MATTER in the claims is directed to a complexity of 40 kb as given in claim 131, line 5, for example, plus other claims. Consideration of the cited support for the newly added claims revealed that the closest disclosure is given in the instant specification on page 20, lines 13-17; page 37, lines 4-12; and on page 37, line 24, through page 38, line 11. It is noted that all complexities for probes are described as being on the order of 50 kb or greater whereas the 40 kb size is only disclosed regarding a probe length and not its complexity. It is additionally noted that probe size is different from complexity as defined in the specification, for example, on page 37, lines 4-12, due to correction for repeat content that may be present in a probe. Claim 145 is included hereinunder because of the added unclarity regarding the confusing interpretation of 50 versus 50 kb which is also added NEW MATTER via the amendment adding unclarity.

An additional NEW MATTER limitation is given in claim 139 in that the phrase "no more than 1 micron" is different from the limitation, as originally filed, in the bridging sentence between pages 119 and 120 as being "less than 1 micron".

Claims 136, 144, 145, and 150-153 are rejected, as discussed below, under 35 U.S.C. § 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In the claims the probe sizes and complexities are not always accompanied with either the kb or kilobase limitations. For example, in claim 135 the probe sizes are given as 35 kb and 200 kb which clearly defines said sizes. In contrast, in claim 136 the sizes of separations between probes is given as "about 25" to "about 225 kb". The kb limitation is notably missing after the "about 25" limitation. It is acknowledged that the applicants probably meant the "about 25" phraseology to mean about 25 kb. Separations of only 25 bases are, however, possible. Applicants are requested to clarify the claims by citing units of size with each numeric value to avoid possibly confusing interpretations. It is also noted that such unclarity exists in claims 144 and 145 wherein kb is not uniformly cited regarding complexity limitations. The specification at page 37, lines 4-12, cites a number of complexities wherein all numeric values are clearly denoted either by kb or kilobase units.

Claims 150-153 are vague and indefinite due to unclear wording regarding the probe labeling practice in the claims. In claim 150, part (c), "a distinct label" is added to "said nucleic acid probes". This is confusing in that a singular label is apparently being added to plural "probes". It is suggested that applicants may wish to amend the claim to indicate that a distinct label is added to "each" of said probes to clarify the

labeling practice. This also would clear up the unclarity of how observation of proximity or overlap is accomplished in step (d) of claim 150 without requiring multiple label types.

An executed copy of PTO Form 1449, filed 9/4/97, is enclosed herewith. Several citations thereon are lined through because no copy of the references were found in the file to be considered.

No claim is allowed.

Papers related to this application may be submitted to Group 1800 by facsimile transmission. Papers should be faxed to Group 1800 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993) (See 37 CFR § 1.6(d)). The CM1 Fax Center number is (703) 305-3014.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ardin Marschel, Ph.D., whose telephone number is (703) 308-3894. The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, W. Gary Jones, can be reached on (703) 308-1152.

Any inquiry of a general nature or relating to the status of this application should be directed to the Chemical Matrix receptionist whose telephone number is (703) 308-0196.

December 8, 1997

*Ardin H. Marschel*  
ARDIN H. MARSCHEL  
PRIMARY EXAMINER  
GROUP 1800